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**A FOREIGN BODY IMPACTED IN THE LARYNX  
SEVENTEEN MONTHS; REMOVAL BY  
LARYNGO-TRACHEOTOMY;  
RECOVERY.**

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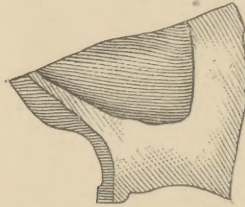
L. H., thirty-nine years old, a farmer, on April 28, 1891, while cutting down a tree, was struck upon the back of the neck by a heavy falling limb and thrown to the ground. Consciousness was lost. The man was immediately picked up by his companions, carried to the house, and a physician summoned. After a half-hour consciousness returned, but there was inability to speak and complaint of a sense of suffocation. Examination of the mouth disclosed that an upper set of three artificial teeth, which the man had been wearing, was missing, and it was at once surmised he had swallowed it. His companions repaired to the place where he had fallen and there found the three artificial teeth, attached to a small piece of the broken plate, and, also, a part of the plate about the size of a pea. The greater part of the rubber plate was, however, missing.

For nine days the man suffered inexpressible agony, gasping for breath, and spent most of this time sitting in a chair, not being able to lie down. At the expiration of this time, during a violent attack of coughing, with threatening suffocation, he expelled the larger part of the missing plate of rubber. (Fig. 1.) He now was



greatly relieved, could breathe with more ease, and was able to sleep at night in the recumbent posture. Sleep was, however, not as sound as before the accident, for he was awakened at times by violent attacks of coughing and a sense of suffocation, which would gradually subside, when he could resume sleep. His voice, however, had not yet returned. What had become of the remaining part of the rubber plate was a mystery. The patient was not conscious of the presence of a foreign body in his larynx. The loss of voice and the other

FIG. I.



symptoms of laryngeal irritation were attributed to the irritation resulting from the nine days' sojourn of the piece of plate and its subsequent expulsion. From this time on the man's health began to fail and his voice did not entirely return until several months later, and even then it remained husky up to the time of operation. Following the accident there had been a constant cough.

In the fall of 1891, about six months after the accident, he had repeated chills and some fever; and soon he began to expectorate muco-purulent matter and to have night sweats; his breath also became offensive. In April, 1892, he expectorated some blood. These symptoms all seemed confirmatory of a diagnosis of tuberculosis, in which it was believed the larynx participated. Some time later the man was presented by his physician to the Medico-Pathological Society of York County, when I first saw him. He was emaciated; his

complexion was sallow ; his expression anxious and distressed. His breath was exceedingly offensive and of a gangrenous odor. A constant laryngeal cough was present, with muco-purulent expectoration. The temperature was slightly elevated and the pulse-beat accelerated. A physical examination of the chest revealed only bronchial râles ; no cavities or consolidation in any part of either lung. The voice was husky and weak. A presumptive diagnosis of a foreign body in the larynx was made. On laryngoscopic examination

FIG 2.

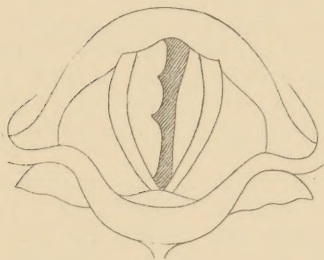
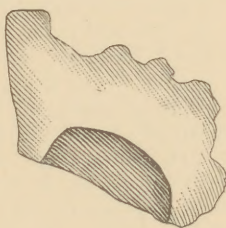


FIG 3.



the missing piece of plate was seen lying in the larynx in an antero-posterior direction, with its serrated edge upward and about one-eighth of an inch below the vocal bands. (Fig. 2.) An operation for its removal was advised and was performed in the presence of a number of physicians at the York Hospital, October 3, 1892.

About half an hour before the operation the patient was given a hypodermatic injection of morphine and atropine, and was then anesthetized with chloroform. The skin over the larynx and trachea having been rendered aseptic, an incision was made through skin and fascia, from about the middle of the thyroid cartilage downward about two inches and a half. After all hemorrhage was stopped an incision was made in the larynx through the

crico-thyroid membrane, cricoid cartilage, and downward through the first two rings of the trachea. The edges of the wound being retracted, an angular nasal polypus-forceps was introduced upward into the larynx and grasped the piece of plate, which, after a strong pull, could not be dislodged. The forceps was withdrawn and again introduced upward, but more nearly perpendicularly, and again grasped the piece of plate; by giving the forceps a slight turn to the right, I succeeded in dislodging and removing the foreign body. (Fig. 3.) A rubber canula was then introduced into the inferior portion of the opening in the trachea. The crico-thyroid membrane, cricoid cartilage, and trachea, above the canula, were united with carbolized catgut sutures, while the skin and fascia were united with silk sutures. The usual antiseptic dressings were applied around the canula. Over the mouth of the canula was kept a thin layer of moistened sublimate gauze through which the patient could breathe.

During the time that the canula was in the trachea, the temperature of the room was kept at from  $75^{\circ}$  to  $80^{\circ}$ , and the atmosphere was charged with moisture from a kettle of boiling water. The object of having the temperature of the room so high and its atmosphere charged with moisture, was for the purpose of approximating the condition of the inspired air to that in which it would be if inspired through the nostrils. The patient's temperature, seven hours after the operation, was  $100.2^{\circ}$ , falling to  $100^{\circ}$  on the following day, and continuing thus for four days, when it began to gradually fall until the eighth day, when it reached  $99.2^{\circ}$ , where it remained until the patient was discharged.

There was not much discharge from the canula or wound, except on the day following the operation, when there was discharged from the canula some mucus, evidently from the situation in which the



foreign body had been impacted. On the third day the canula was removed, and the opening in the trachea closed in three days by healthy granulations. The dressings were changed daily, and on the fourteenth day the patient was discharged from the hospital, with the upper portion of the wound entirely healed and the lower portion covered with a cicatrix. Upon his discharge the patient was greatly improved in appearance and color. Cough had ceased; the expectoration was changed in character; the offensiveness of the breath had disappeared; and the voice had become more clear, although still husky and weak. Four weeks after his discharge from the hospital the improvement was still more marked. The man was much stouter and had gained nineteen pounds in weight.

There are several points of interest in this case. The first that attracts attention is the remarkable tolerance, by the larynx, of a foreign body so large as the one removed. Again, the extraction of such a foreign body by means of the laryngeal forceps would have been impossible, because of its situation and the fact that it had become imbedded. The symptoms presented a striking resemblance to those of laryngeal tuberculosis, but a careful and thorough examination was sufficient to disprove such a diagnosis. Finally, the case demonstrates the point that when a foreign body is impacted below the rima glottidis the only safe and proper method of extraction is by tracheotomy or, preferably, laryngo-tracheotomy, which does not entail any serious injury upon the vocal apparatus.

